

REMARKS

In the office action, claims 1-3 and 5-6 were rejected under 35 U.S.C §102(a) as being anticipated by U.S. Patent No. 5,886,973 (Yoshida et al.) and claims 4 and 7 under 35 U.S.C §103 as being unpatentable over Yoshida et al. Applicants respectfully traverse this rejection based on the following.

The present invention transmits from each of a plurality of transmitting antennas a reference signal having a code uniquely associated with the respective antennas. Additionally, from each transmitting antenna a different data signal version is. Each version has a different code for the respective transmitting antenna. One illustration of this is shown in Figure 3 of the present application. A unique pilot signal is generated for each antenna and a data signal is mixed with different codes, D1...Dn for each respective antenna.

Yoshida et al does not disclose this arrangement at all. Yoshida does disclose using a different pilot signal per antenna. However, for a particular data stream same CDMA user signal is sent over each antenna. This is illustrated in Figure 1 where the user signal encoder for each user signal (101-1 through 101-K) is sent to each antenna after passing through a weighting circuit. Accordingly, a single data stream is not uniquely coded for each antenna. Yoshida teaches that to distinguish the signals a delay unit is used for each antenna, see column 4, lines 39-52. A delay of several chip periods separates each antennas transmission. The selected number

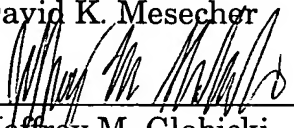
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Application No.: 10/068,718

of chip periods is based on the delay dispersion so that there will be no inner-symbol interference between the different transmitting antenna. The present invention provides improvement over that configuration where each data signal has a unique code. Accordingly, the delay between the different transmitting antennas is not required. The data signals can be distinguished by their code. Accordingly, the using a proper code selection inner-symbol interference can be avoided. Accordingly, the present invention is patentable over Yoshida et al.

For the above reasons, Applicant respectfully submits that the claims are allowable. If the Examiner believes that there are any unresolved issues, the Examiner is respectfully requested to contact the undersigned to resolve those issues. Reconsideration and entry of this amendment is respectfully requested.

Respectfully submitted,

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